

NELAC Proficiency Testing FAQs

1. Why are the PT samples issued by program/matrix/analyte and not by method also?

The current NELAC requirement is to successfully analyze one PT sample per analyte on a biannual basis. The laboratory may choose by which method to analyze the PT. With the privatization of the EPA's WS and WP PT programs, laboratories will purchase the samples from commercial Proficiency Test Providers. Prior to the privatization the samples were provided free of charge by EPA's contracted supplier. With this unavoidable additional cost in mind, the PT Committee developed Chapter 2 of the NELAC standards in order to ensure that data quality would be maintained, while additional unnecessary costs to the laboratories would not be written into the standards. Section 2.1.1 of the NELAC standards states that one of the purposes of the PT program is to include "a program which is affordable by all participants." Thus, the PT Committee strived to keep costs down while still ensuring that enough PT data is generated to help the Accrediting Authorities make informed decisions on whether or not a particular laboratory is able to produce a valid result for a particular analyte.

NOTE: Although the NELAC requirement for PT analysis is by program/matrix/analyte, the USEPA Office of Water has passed a rule requiring PT samples to be successfully analyzed by program/matrix/analyte/**method** on an annual basis for SDWA compliance.

2. How does a laboratory comply with both the EPA SDWA and NELAC PT requirements?

To comply with both SDWA and NELAC requirements, laboratories must analyze one PT sample at the beginning of the year utilizing the same method used for routine analysis, e.g., Arsenic method A. The laboratory must pass 2 out of 3 of the most recent studies. For any additional method(s) used for SDWA compliance monitoring, the laboratory must analyze a PT sample utilizing the next method, e.g., Arsenic method B. The laboratory must have passed the PT by the additional method once in order to provide results to demonstrate compliance with the SDWA. For the second round of PT samples (approximately 6 months later), the laboratory must analyze a PT sample utilizing the same method used for routine analyses, again with a pass/fail record of 2 out of 3 of the most recent studies. Thus the laboratory would comply with the SDWA requirement of one PT per method per year, and the NELAC Standard requiring PTs by matrix/analyte (SDWA/Arsenic) twice per year.

3. Why do laboratories have to analyze PT samples twice a year?

The decision to require PT samples twice a year was not made arbitrarily. The NELAC PT Committee's goal was to protect public health and improve laboratory data quality. The Accrediting Authority monitors the quality of the laboratory data by the evaluation of PT sample analysis and on-site assessments. Because laboratories only receive on-site assessment on a biennial schedule, PT data is the only tool used by the Accrediting Authority to monitor a laboratory's performance between assessments. The NELAC PT Standard must give the Accrediting Authority timely and adequate data by which to judge a laboratory's performance. A less frequent analysis of PT samples would be neither timely nor adequate while a more frequent analysis would be burdensome to the laboratories. The PT Committee felt that a frequency of twice a year best met NELAC's goal of protecting public health and improving environmental data quality and gave the Accrediting Authorities adequate data to monitor ongoing laboratory performance.

Additionally, one of the premises of the NELAC Standards was that participating states would not be required to lower their current standards. Since a number of states have historically required two PT studies each year, the requirement of biannual PT analysis would comply with these states current standards.

4. Can WP PT samples be used to satisfy the proficiency testing requirements of the DMRQA program?

Historically there were two WP test samples and one DMRQA test sample. The DMRQA and second WP tests ran concurrently and the results could be submitted for both requirements. If the specific requirements of both

programs are met it is still possible for a PT study to be used for both WP and DMRQA proficiency testing requirements. The scheduling of the WP and DMRQA testing and the required analytes must coincide. If either the scheduled study dates or the required analytes are different for the WP and DMRQA programs; separate PT studies must be analyzed. Another requirement that must be met under DMRQA is that the permit holder is responsible for reporting the results and identifying the laboratory(s) that analyzed the study. Therefore, the laboratory will submit the WP results to the PT provider but must submit the DMRQA to the permittee who will then submit the results to the PT provider. Also PT analysis by another laboratory may only be for those tests that are routinely conducted by someone other than the permittee. A PT sample must be analyzed and submitted by the permittee for any analytes routinely analyzed by the permittee.

5. Now that the EPA has externalized their PT programs, where can PT samples be obtained?

The NELAC website (<http://www.epa.gov/ttn/nelac>) provides information to obtain the current listings of accredited proficiency test providers from PTOBs/PTPAs in both electronic and print formats. The PTOB/PTPA listing includes provider contact information and fields of testing offered. For example, the NELAC site provides a link to the NIST website (<http://ts.nist.gov/nvlap>) listing of NVLAP accredited providers. The NELAC site also provides contact information needed to obtain a printed copy of this information from NIST NVLAP.

6. Where does a lab obtain non-WS/WP PT samples when a NIST accredited provider is not available for that type of sample or compound(s)?

For programs and compounds for which NIST/NVLAP accreditation is not available (non-WS/WP), laboratories shall obtain PT samples for the purposes of NELAC accreditation from a provider who is accredited by an American National Standards Institute/Registrar accreditation Board (ANSI/RAB)-accredited registrar or equivalent Proficiency Test Provider Accreditor (PTPA) or has provided evidence to the laboratory of applying to an ANSI/RAB-accredited registrar or equivalent Proficiency Testing Oversight Body (PTOB)/PTPA for the compounds/matrices offered.

For fields of testing for which PT samples are not available from either a NELAP PTOB/PTPA (e.g. NIST) or an ANSI/RAB-accredited registrar or equivalent PT provider, a Primary Accrediting Authority may accept PT results from non-accredited PT providers so laboratories shall check with their primary accrediting authority for accepted PT providers.

7. Can an Accrediting Authority select a single PT provider for their State?

Chapter 2 does not prohibit a state from contracting with one or more PT providers for the labs in their state to choose from. However, if a laboratory chooses to use a PT provider not included in the state's contract and the provider meets the requirements of the NELAC standards, the Accrediting Authority shall accept their data. There is no difference between an Accrediting Authority preparing and distributing PT samples to its laboratories and an accrediting authority contracting with a PT provider to handle the preparation, distribution, or data analysis. In either case, the accrediting authority is acting as the PT provider for the laboratories in their state.

The only limitation that Chapter 2 places on the options available to an Accrediting Authority is that Accrediting Authorities shall accept data from any NELAP-designated PTOB/PTPA-approved PT provider (Section 2.2.4). An Accrediting Authority may choose which providers to contract with, and may choose to describe specific requirements for reporting and data handling in their contract.

8. Can an accrediting authority have specific scheduled dates for PT analysis?

As long as a semi-annual schedule is maintained, the primary accrediting authority can set specific dates for which the PTs are to be analyzed. The AA may also have specific requirements for the data reporting format to be submitted. This may include either paper or electronic data submission. You must refer to your primary accrediting authority's regulations since individual accrediting authorities PT scheduling and reporting requirements may vary.

9. In section 2.5 what does scheduled study date mean?

The scheduled study dates are the predetermined dates that the PT providers have planned as the shipment date of PT samples. The PT suppliers can supply you with their list of scheduled study shipment dates. If a problem occurs and the shipment date is altered, it is the responsibility of the PT provider to adjust the due date for the results so that the laboratories have up to the full 45 days to complete the PT study.

10. Please explain the difference between the externalized USEPA PT program and the NELAC PT program.

The USEPA has externalized their old PT system for WS and WP analytes. An agreement was reached between the USEPA and NIST to provide a program to accredit PT Providers. Any NELAP-recognized Accrediting Authority must follow the NELAC PT standards for their programs. Other programs will follow the USEPA externalized program requirements as published in the USEPA National Standards for Water Proficiency Testing Studies Criteria Document. NELAC uses this document as a basis for its PT program; however, NELAC has expanded these requirements to include information on scheduling PT studies, reporting requirements, etc. The USEPA externalized program does not issue guidance on these matters at this time, and leaves it up to the discretion of the states. NELAC has expanded the list of analytes and has published acceptance criteria for the additional analytes.

11. What are the PT requirements for laboratories who test aqueous samples using RCRA methods?

Laboratories who analyze samples for ground water only using RCRA methods shall analyze a proficiency testing sample from the CWA-Water NELAC PT Fields of Testing table for those analytes contained in that table. For analytes not included in the CWA-Water table, no proficiency testing sample currently exists for accreditation purposes and analysis of a PT sample is not required at the present time.

12. Continuing accreditation requires analysis of PT samples to be “approximately six months apart”. What is the amount of time that constitutes approximately six months?

For continuing accreditation, the closing dates of successive proficiency rounds for a given field of proficiency testing shall be no more than seven months apart. Failure to meet the semiannual schedule is regarded as a failed study.

13. How are supplemental PT studies for demonstrating corrective action used by Accrediting Authorities?

The Accrediting Authorities have the final authority in accepting and rejecting results from a supplemental PT study used for demonstrating corrective action. This is especially true if the laboratory has failed two consecutive PT studies for an analyte. The laboratory must contact their AA to resolve the situation.